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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/626,574 | 07/27/2000 | Michael R. May | SI0000049 | 9605 |

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EXAMINER

LUU, AN T

| ART UNIT | PAPER NUMBER |
|----------|------------------|
| 2816 | <i>Re mailed</i> |

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/626,574 | MAY, MICHAEL R. |
| | Examiner An T. Luu | Art Unit 2816 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 13 March 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-6,9,11-15,17 and 18 is/are rejected.

7) Claim(s) 7-8,10,16 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's Response filed on 3-13-02 has been received and entered in the case. The rejections set forth in the previous Office Action are partially maintained as indicated below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 9, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by the Farrell et al. reference (U.S. Patent 5,510,740).

The Farrell et al discloses in figure 8 an apparatus comprising a filter 820 received an input signal (reset signal) 802 via a processing element 816 for producing a pulse signal 826 and a latch 824 coupled to the filter for latching the pulse signal as claimed in claims 1, 6, 9 and 15. It is noted that signal 802 is received from a terminal which is an input gating device.

As to claim 11, it is inherent that there are two modes for a gating device (i.e., ON/OFF).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Farrell et al. reference (U.S. Patent 5,510,740) in view of the Tsukikawa reference (U.S. Patent 6,121,812).

The Farrell et al discloses all the claimed invention except for having a latch element comprising specific components being configured as claimed. Tsukikawa discloses in figure 8 a latch circuit 30 comprising a first inverter 42 and a second inverting logic element (NAND gate 43) being configured as recited in claims 2-3. It would have been obvious to one skilled in the art to replace a generic latch circuit disclosed by Farrell by the one taught by Tsukikawa because the skilled artisan in the art would easily recognize that a latch circuit can be implemented in many different ways in the art without patentable distinction. The selection among different designs of a latch is seen as a design expedient dependent upon the particular requirement of the application.

6. Claims 4-5, 13-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Farrell et al. reference (U.S. Patent 5,510,740) in view of the Okada reference (U.S. Patent 4,306,198).

The Farrell et al discloses all the claimed invention except for having a filter element comprising specific components being configured as claimed. Okada discloses in figure3 an apparatus comprising a capacitor C coupled to the input T1 and a gating circuit, including a controlled impedance Q5, Q6, coupled to the capacitor such that the capacitor and an impedance of at least one element of the gating circuit are tuned based on the rise time and fall time of the input signal as required by claims 4-5 and 13-14. It is noted that an inverter is not required since the output of the inverter is connected to a drive transistor Q1, if the complementary type of Q1

is used instead. It would have been obvious to one skilled in the art to replace a generic filter circuit disclosed by Farrell by the one taught by Okada because the skilled artisan in the art would easily recognize that a filter circuit can be implemented in many different ways in the art without patentable distinction. The selection among different designs of a filter is seen as a design expedient dependent upon the particular requirement of the application.

As to claim 17, the scope of this claim is similar to the combination scope of claims 9 and 13-14. Thus, it is rejected for the same reasons set forth above.

As to claim 18, the scope of this claim is similar to that of claims 2 or 12. Thus, it is rejected for the same reason(s) set forth above.

Response to Arguments

7. Applicant's arguments filed 3-13-02 have been fully considered but they are not persuasive.

Regarding to rejection of claims 1, 6, 9, 11 and 15 under 35 USC 102(b), Applicant argued that the prior art (Farrell) does not teach or suggest the limitation "the filter module produces a **pulse** signal in response to an **edge** of the input logic signal" and Farrell teaches away from claim 1 because it is includes a clock input line 102 for proper functioning of the circuit. Examiner respectfully disagrees with the above assertions because column 21, lines 34-44, of Farrell teaches the filter module produces a **pulse** signal in response to an **edge** of the input logic signal as required by claim. As to "teaching away from claim 1", the recitation of claim recites the transition term "comprises" which is interpreted as "being inclusive or open-ended and does not exclude additional, un-recited elements or method steps" (MPEP Sec. 2111.03). Further,

there is no mention of clock input 102 in the rejection of claim. Therefore, the existence of clock input 102 is a non-issue.

Regarding to rejection of claims 2, 3, 7 and 12 under 35 USC 103(a) by Farrell in view of Tsukikawa. Applicant has argued that the independent claims (1 and 9) do not read on Farrell. Therefore, their dependent claims (2, 3 and 12) cannot be rendered obvious by Farrell in view of Tsukikawa. Examiner respectfully disagrees because claims 1 and 9 do read on Farrell as noted above.

As to claims 7 and 16, Examiner agrees with Applicant's response. Therefore, the rejection of these claims has been withdrawn and will be indicated as allowable subject matter. Claim 8 is allowable since it depends upon claim 7.

Regarding to rejection of claims 4, 5, 13, 14, 17 and 18 under 35 USC 103(a) by Farrell in view of Okada. Applicant has argued that the independent claims (1 and 9) do not read on Farrell and it is not obvious to combine references to reject his dependent claims. Examiner's response noted above is applicable here.

Allowable Subject Matter

8. Claims 7, 8, 10 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose a second filter being structurally configured in the claimed apparatus as recited.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 703-308-4922. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

An T. Luu 
5-24-02

